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Nulhegan Basin Division
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July 2011



U.S. Fish & Wildlife Service


Silvio O. Conte

*National
Fish and Wildlife
Refuge*

Nulhegan Basin Division



Moose pair in winter
©Roger Irwin



*The Nulhegan Basin -
Sculpted by Nature,
Worked by Human
Hands*

*A Unique Landscape
Conserved for Wildlife,
Habitat, and People*

Silvio O. Conte - a Champion of Natural Resources



This blue goose, designed by J.N. "Ding" Darling, has become the symbol of the National Wildlife Refuge System.

The Nulhegan Basin- A Special Focus Area

What is your lifelong dream? For the late congressman Silvio O. Conte, it was to see to the preservation and restoration of New England's longest river- the Connecticut River. To honor their colleague, Congress passed the Silvio O. Conte National Fish and Wildlife Refuge Act (Act) (P.L. 102-212) in 1991. The Act authorized the U.S. Fish and Wildlife Service (Service) to establish a national fish and wildlife refuge to protect the diversity and abundance of native species within the Connecticut River watershed.

The Nulhegan (pronounced Nul-HEE-gan) Basin in northeastern Vermont (a Native American term referencing log or deadfall traps used to capture small game) was identified as a high priority special focus area within the watershed when the Silvio O. Conte National Fish and Wildlife Refuge was first established. The basin was determined to possess high biological value, because of the presence of rare species, wetlands, and contiguous migratory bird habitat.



Nulhegan River

Tom LaPointe/USFWS



©David Govatski

Black-backed woodpecker

When Champion International Corporation announced that it would sell 132,000 acres of land in northern Vermont, including the Nulhegan Basin, the Service was very interested in protecting it under the Act. The Nulhegan Basin Division (division) was established in 1999 when the 26,000 acre area was purchased. The Vermont Agency of Natural Resources purchased 22,000 acres adjacent to the division to form the West Mountain Wildlife Management Area, and Plum Creek Timber Company purchased the remaining 84,000 acres that surrounds the federal and state properties. The combination of ownerships will provide long-term conservation of important wildlife habitat as well as preservation of traditional uses of the land.

Basin History

The basin was formed when a pool of magma solidified just below the earth's surface more than 300 million years ago and slowly eroded away to create a crater-like "basin" roughly 10 miles in diameter surrounded by hills. What was once bubbling with hot magma is now one of the coldest lowland areas in the Northeast. Annual snowfall averages 100 inches and typically there are about 100 frost-free days each year.



Log Drive on the Connecticut River

Temperatures range from the low 90's (F) in the late summer months to almost -40 degrees (F) in the dead of winter.

In the heart of what is known as the Northeast Kingdom, the basin has been the home to hardworking people for centuries. Logging, sawmill operation, home-based trades, hunting, trapping, railroading, crop farming, raising dairy herds, extracting granite, and tapping sugar maple trees have all been a way of life here. Several privately owned hunting camps, some that have existed in the same family for generations, are still present on the division.

Managing for Wildlife, Habitat and People

Wildlife



Red eft

The area is well known for being a remote and rugged landscape with an abundance of boreal bird species, mammals, reptiles, amphibians and rare plants. The black-backed woodpecker, black-and-white warbler, black-throated blue and green warblers, Blackburnian



Williamson's emerald

warbler, blackpoll warbler, Canada warbler, boreal chickadee, and many other migratory songbirds can be seen and heard in the division's forests. American woodcock, ruffed grouse, waterfowl, and various birds of prey also can be commonly observed. A variety of mammals such as moose, black bear, white-tailed deer, snowshoe hare, red squirrel, beaver, fisher, bobcat, and coyote are year round residents.

In addition to being named Vermont's largest Important Bird Area, having some of the largest statewide populations of moose and black bear, and providing critical habitat for the state endangered spruce grouse, the division also provides important shelter for wintering deer. The largest deer wintering area (or deer yard) in the state of Vermont occurs on the division.

Habitat

Located just a few miles south of the Canadian border, the Nulhegan Basin's vegetation contains elements of the boreal forest that occurs farther to the north. The basin is predominately a forested habitat interspersed with streams and various



Tamarac needles in fall

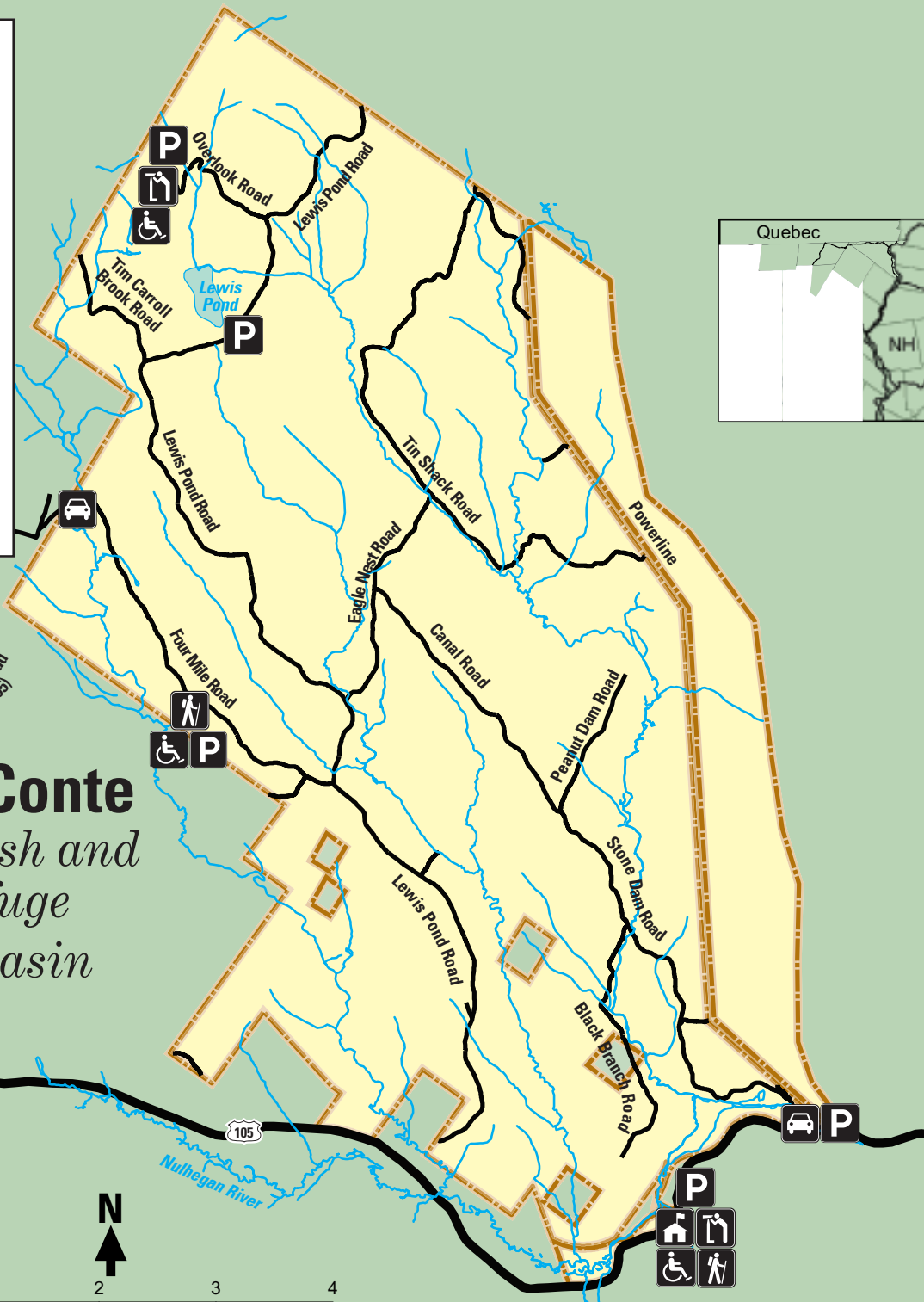
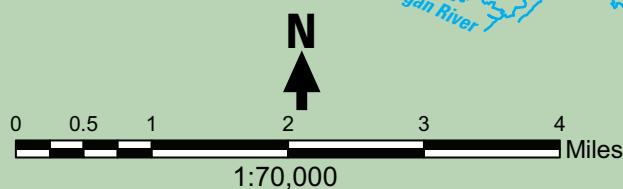
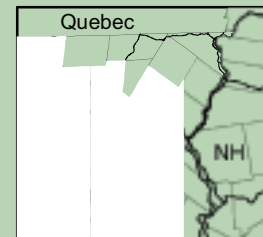
Legend

-  Refuge Boundary
-  Private/State Owned
-  Headquarters/
Visitor Contact
Station
-  Overlook
-  Entrance
-  Parking
-  Trail
-  Accessible
-  River
-  Paved Road
-  Gravel Road

Silvio O. Conte

National Fish and Wildlife Refuge

Nulhegan Basin Division



*Pitcher plant*

types of wetlands such as peatlands, bogs, beaver-influenced wetlands, and forested wetlands.

Northern hardwood forest, dominated by sugar and red maple, beech, and yellow and paper birch, cloak the mountains of the basin rim and the larger hills of the basin interior. Oaks, commonly found in forests throughout the United States, are notably absent in the northern forest. The basin bottom is dominated by spruce-fir forest. Red and black spruce and balsam fir are the principal trees in these forests. Tamarack, northern white cedar, black ash, and speckled alder also occur commonly in the basin, but are restricted to the wetland areas.

Many rare plants, orchids, and other wildflowers occur in the division including the sundew, pink, white, and yellow lady slippers (or moccasin flower), Canada lily, purple fringed orchid, cotton grass, rhodora, pitcher plant, trout lily, and many, many more.

People

With little intrusion by human development, the division offers some of the best opportunities for wildlife-dependent recreation in northern Vermont. An extensive road system gives visitors the ability to access and experience the rugged and remote quality of the division.



Keith Weaver/USFWS

Snowshoeing

Visitor Opportunities

*Snowshoe hare*

Environmental Education & Interpretation

Is adding a Canada warbler to your birding life-list something you've only dreamed about or is photographing a spruce grouse your idea of fun? Does that perfect vacation include the chance to see a moose or to hunt a snowshoe hare? Whether it's observing or photographing wildlife that makes your heart skip a beat, planning that ideal hunting or fishing trip, or hiking off the road for a backwoods experience, the division has something for everyone.

Organizations and schools are welcome to the division as an outdoor classroom for a variety of activities from birding trips to snowshoe treks for winter track identification to geology discussions. Interpretive exhibits are located at the headquarters/visitor contact station. Research and group events are evaluated on a case by case basis and may require a Special Use Permit. Please contact the division headquarters for more information when planning such activities.



Keith Weaver/USFWS

Environmental Education

Hunting and Fishing

The division is part of a premier region of the state for both hunting and fishing. Game species that can be hunted include white-tailed deer, ruffed grouse, snowshoe hare, moose, black bear, and woodcock. Lewis Pond and the North and Black branches of the Nulhegan River offer great

©Paul Erickson



Lewis Pond

opportunities for trout fishing. Trapping is allowed by Special Use Permit from division headquarters. For more information or to request a copy of the current division regulations for hunting and fishing, please contact the division headquarters prior to your visit

Photography and Wildlife Observation

Abundant public access gives visitors the opportunity to photograph and observe wildlife, plants, and scenic vistas in a variety of settings during any season. Best wildlife viewing

©Roger Irwin



Bobcat

Division Destinations

times are early morning and evening. Some of the best opportunities for observing and photographing moose occur just west of the division headquarters building along Route 105.

The Basin and Lewis Pond Overlooks provide panoramic vistas of the Nulhegan Basin and the surrounding landscape. The Lewis Pond Overlook has a small, fully accessible parking area and short trail leading to an observation area. The Basin Overlook is accessible from the visitor contact station parking lot.

Kathy Fournier/USFWS



Visitor Contact Station

Mollie Beattie Bog, recognized as a state significant site, is among the most significant black spruce woodland bogs in Vermont. The self-guided, newly renovated, 200-foot, fully accessible boardwalk and trail includes signs illustrating bog formation, the interesting rare plants that inhabit the black spruce bog area, and the legacy of the late Mollie Beattie. The 76-acre bog, donated to the Service by Champion International, was named after the first female director of the Service, a former resident of Vermont. Visitors to the interpretive site are requested to remain on the boardwalk to avoid disturbance to the sensitive wetland habitat. In addition, located behind

the visitor contact station is the Nulhegan River Trail, worked on by members of the Northwoods Stewardship Center's Back Country Trail Crew and the Nulhegan Basin's U.S. Youth Conservation Corps (YCC). This trail is a short interpretive walk that offers visitors a chance to experience the uniqueness of the basin without driving into the division if you are short on time.

Things to know

The public is welcome to visit the division year-round, however; the type of access (i.e., foot, automobile, snowmobile) permitted varies seasonally. Road conditions can sometimes change rapidly, either from seasonal weather transitions, or flooding. Please be alert at all times for road hazards while traveling on the division. Nearly 40 miles of gravel roads are open to driving or hiking in the summer and fall months. Hiking can also be done along unmarked wooded pathways and stream courses. In the winter, access is by snowmobile, cross country skis, or snowshoes. The snowmobile trail system located on the division is managed by the Vermont Association of Snow Travelers according to state wide and division specific regulations.

The division is closed to all vehicular access during "mud" season which is the time period immediately after snowmobile season has ended. During this time the division is still accessible by foot. Please call 877/811 5222 for more information on current road conditions within the division and surrounding areas.

An informational kiosk is located at each entrance to the division. Seasonal information may be posted at the kiosks to alert visitors to good wildlife viewing opportunities, to current logging operations and logging truck traffic, or to current



Holly Gaboriault/USFWS

Snowmobilers at kiosk

safety precautions. Brochures and maps are also available at these locations. Please contact division headquarters for any additional information.

Volunteers

The "Friends of the Nulhegan" is an advocacy group that was created to support the division. For more information about the Friends of the Nulhegan, and how to become a member, visit them on the web at www.friendsofthenulhegan.com or contact the division headquarters to join our volunteer team.

Come Visit!

The division headquarters and visitor contact station is located on Vermont Route 105 approximately 10 miles east of Island Pond, Vermont and six miles west of Bloomfield, Vermont. The division is accessible via Henshaw Road off of Rt 105 (just outside of Island Pond), or Stone Dam Road (1½ miles east of the visitor contact station) also off of Rt 105. Please contact us at 802/962 5240 prior to your visit for more information.

© Bryan Pfeiffer



Silver-bordered fritillary